

IN THE SPECIFICATION

Please insert the following paragraph on page 1, line 4 (after the title):

Q1  
- This application claims the benefit of U.S. Serial Number 09/337,086, entitled "Integrated Multilayered Microfluidic Devices and Methods for Making the Same", filed June 21, 1999, which is a continuation-in-part of U.S. Serial Number 09/235,081, filed on January 21, 1999, which, in turn, claims the benefit of U.S. Provisional Application Number 60/103,701, filed October 9, 1998. -

IN THE CLAIMS

1. (Amended) An apparatus for performing parallel, independently controlled molecular reactions, comprising:

- Q10 B1 1
- (a) a supporting substrate comprising a ceramic layer,
  - (b) said substrate comprising channels and vias defining a plurality of separate well structures separated by thermal insulating material,
  - (c) a heater associated with each well structure,
  - (d) a cooling element associated with each well structure,
  - (e) a temperature monitor associated with each well structure; and
  - (f) conductive pathways extending along and into the device, wherein the pathways make electrical connection to said heaters, coolers, or temperature monitors.
- Q2

2. (Unchanged) The apparatus of Claim 1, wherein the molecular reaction is polymerase chain reaction.